



Science Toolkit: Grade 8 Objective 2.D.2.a

Student Handout: Science: Grade 8 Objective 2.D.2.a

Standard 2.0 Earth/Space Science

Topic D. Astronomy

Indicator 2. Identify and explain celestial phenomena using the regular and predictable motion of objects in the solar system.

Objective a. Identify and describe the relationships among the period of revolution of a planet, the length of its solar year, and its distance from the sun.

Selected Response (SR) Item

Question

Use the information below to answer the following question.

Our solar system consists of the sun, planets, moons, and other objects. Each planet revolves around the sun and rotates on an axis. A data table comparing the four inner planets of the solar system is shown below.

FOUR INNER PLANETS		
Planets	Average Distance from the Sun (kilometers)	Time to Complete One Rotation (hours)
Mercury	57,700,000	1,407.5
Venus	108,500,000	5,832
Earth	149,000,000	24
Mars	227,000,000	24.6

Which planet takes the most time to revolve around the sun?

- A. Mercury
- B. Venus
- C. Earth
- D. Mars

Correct Answer

D. Mars

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